IN THE CLAIMS:

Please write the claims to read as follows:

1. (Previously Presented) An intermediate network device for use in a computer network carrying network traffic corresponding to sessions, the intermediate network device comprising:

a traffic scheduler having one or more resources for use in forwarding network traffic received at the device at different rates;

a classification engine configured to identify the received network traffic based upon predefined criteria; and

a resource reservation engine in communicating relationship with the traffic scheduler and the classification engine,

wherein, in response to a request to reserve resources for a first session associated with a session group identifier (ID), the resource reservation engine determines whether the session group ID of the first session matches a session group ID of one or more second sessions for which resources have previously been reserved and, if so, directs the traffic scheduler to share the resources reserved for the one or more second sessions with the first session.

2. (Original) The intermediate network device of claim 1 wherein

the resource reservation engine includes a data structure for storing information for the sessions, and

the resource reservation engine stores a session group identifier (ID) for each session in the data structure.

3. (Original) The intermediate network device of claim 2 wherein the session group identifier associated with a given session includes a source address of an entity sourcing the traffic flow of the given session and a resource identifier (ID).

4. (Original) The intermediate network device of claim 3 wherein:

the resource reservation engine utilizes the Resource reSerVation Protocol (RSVP) specification standard, and

the session group ID of a given session is contained in a RSVP Path message associated with the given session.

5. (Original) The intermediate network device of claim 4 wherein the first and the one or more second sessions carry voice information.

6. (Previously Presented) The intermediate network device of claim 5 wherein the first and the one or more second sessions originate from a single sourcing entity.

7. (Previously Presented) The intermediate network device of claim 1 wherein the first and the one or more second sessions originate from a single sourcing entity and are directed to two or more different destination entities.

8. (Original) The intermediate network device of claim 7 wherein the first and the one or more second sessions carry voice information and correspond to a call waiting context.

9. (Original) In a computer network having a plurality of entities interconnected by a plurality of intermediate network devices having one or more resources for use in forwarding network traffic corresponding to sessions, a method for sharing resources reserved for a first session with a second session, the method comprising the steps of:

receiving a first resource reservation message associated with a first session, the first resource reservation message specifying a session group identifier (ID);

storing the session group ID of the first resource reservation message;

reserving resources for use with the first session;

receiving a second resource reservation message associated with a second session, the second resource reservation message corresponding to a session group ID;

comparing the session group ID associated with the second resource message with the stored session group ID specified by the first resource reservation message; and

if the two session group IDs match, sharing the resources reserved for use with the first session with the second session.

10. (Original) The method of claim 9 wherein the session group identifier associated with a given session includes a source address of an entity sourcing the traffic flow and a resource identifier (ID).

11. (Previously Presented) The method of claim 10 wherein the first resource reservation message is a Path message in accordance with the Resource reSerVation Protocol (RSVP) specification standard that has been configured to carry the resource ID.

12. (Original) The method of claim 11 wherein the second resource reservation message is a RSVP Resv message corresponding to the second session.

13. (Original) The method of claim 11 wherein the resource ID is disposed in a resource ID object of the RSVP Path message.

14. (Original) In a sourcing entity interconnected with two or more receiving entities by a computer network having a plurality of intermediate network devices, the devices having one or more resources for use in forwarding network traffic corresponding to ses-

sions, a method for sharing resources reserved for a first session with a second session, the method comprising the steps of:

generating a first resource reservation message associated with the first session;

loading the first resource reservation message with a session group identifier (ID);

sending the first resource reservation message with the session group ID toward a first receiving entity;

generating a second resource reservation message associated with the second session;

loading the first resource reservation message with the session group identifier used in the first resource reservation message; and

sending the second resource reservation message with the session group ID toward a second receiving entity,

whereby resources reserved for use with the first session are shared with the second session.

15. (Original) The method of claim 14 further comprising the steps of:

generating a locally unique resource identifier (ID) value; and

generating the session group ID based on the resource ID value.

16. (Original) The method of claim 15 wherein the session group ID includes a source address of the sourcing entity and the resource ID.

17. (Previously Presented) The method of claim 14 wherein the first and second resource reservation messages are Path messages in accordance with the Resource reSerVation Protocol (RSVP) specification standard that have been configured to carry the resource ID.

18. (Original) The method of claim 17 wherein the first and second sessions carry voice information and correspond to a call waiting context.

19. (Previously Presented) A method for reserving resources by a network device for transmission of messages through a computer network comprising:

initiating a first session by the network device;

identifying the first session by writing a session group identifier (session ID) into packets of the first session;

initiating one or more second sessions using the session ID of the first session; and

transmitting a setup message to enable other network devices to share resources between the first session and the second session in response to both the first and second sessions having the same session ID.

20. (Previously Presented) The method of claim 19 further comprising:

including a data structure for storing information for the sessions in a resource reservation engine, and

storing the session ID for each session in the data structure in the resource reservation engine.

21. (Previously Presented) The method of claim 20 further comprising:

identifying a given session by a source address of an entity sourcing the traffic flow of the session and a resource identifier (ID).

22. (Previously Presented) The method of claim 21 further comprising:

utilizing the Resource reSerVation Protocol (RSVP) specification standard in the resource reservation engine, and

inserting the session ID of a session in a RSVP Path message associated with the given session.

23. (Previously Presented) The method of claim 22 further comprising:

carrying voice information over the first and the one or more second sessions.

24. (Previously Presented) The method of claim 23 further comprising:
originating the first and the one or more second sessions from a single sourcing entity.

25. (Previously Presented) The method of claim 19 further comprising:
originating the first and the one or more second sessions from a single sourcing entity and directing the first and the one or more second sessions to two or more different destination entities.

26. (Previously Presented) The method of claim 25 further comprising:
carrying voice information which corresponds to a call waiting context over the first and the one or more second sessions carry voice information.

27. (Previously Presented) A network device for reserving resources in transmission of messages through a computer network comprising:
means for initiating a first session by the network device;
means for identifying the first session by writing a session group identifier (session ID) into packets of the first session;
means for initiating one or more second sessions using the session ID of the first session; and
means for transmitting a setup message to enable other network devices to share resources between the first session and the second session in response to both the first and second sessions having the same session ID.

28. (Previously Presented) The device of claim 27 further comprising:
means for including a data structure for storing information for the sessions in a resource reservation engine, and

means for storing the session ID for each session in the data structure in the resource reservation engine.

29 (Previously Presented) The device of claim 28 further comprising:

means for identifying a given session by a source address of an entity sourcing the traffic flow of the session and a resource identifier (ID).

30. (Previously Presented) The device of claim 29 further comprising:

means for utilizing the Resource reSerVation Protocol (RSVP) specification standard in the resource reservation engine, and

means for inserting the session ID of a session in a RSVP Path message associated with the given session.

31. (Previously Presented) The device of claim 30 further comprising:

means for carrying voice information over the first and the one or more second sessions.

32. (Previously Presented) The device of claim 31 further comprising:

means for originating the first and the one or more second sessions from a single sourcing entity.

33. (Previously Presented) The device of claim 27 further comprising:

means for originating the first and the one or more second sessions from a single sourcing entity and directing the first and the one or more second sessions to two or more different destination entities.

34. (Previously Presented) The device of claim 33 further comprising:

means for carrying voice information which corresponds to a call waiting context over the first and the one or more second sessions carry voice information.

35. (Previously Presented) A method for operating a router comprising:

receiving a setup message indicating that a first session has been initiated by a network device, the first session being identified by a first session ID written into the setup message;

receiving a setup message indicating that at least one second session has been initiated using the session ID of the first session; and

sharing resources between the first session and the second session in response to both the first and second sessions having the same session ID.

36. (Previously Presented) The method of claim 35 further comprising:

including a data structure for storing information for the sessions in a resource reservation engine, and

storing the session ID for each session in the data structure in the resource reservation engine.

37. (Previously Presented) The method of claim 36 further comprising:

identifying a given session by a source address of an entity sourcing the traffic flow of the session and a resource identifier (ID).

38. (Previously Presented) The method of claim 37 further comprising:

utilizing the Resource reSerVation Protocol (RSVP) specification standard in the resource reservation engine, and

inserting the session ID of a session in a RSVP Path message associated with the given session.

39. (Previously Presented) The method of claim 38 further comprising:

carrying voice information over the first and the one or more second sessions.

40. (Previously Presented) The method of claim 39 further comprising:
originating the first and the one or more second sessions from a single sourcing entity.

41. (Previously Presented) The method of claim 35 further comprising:
originating the first and the one or more second sessions from a single sourcing entity and directing the first and the one or more second sessions to two or more different destination entities.

42. (Previously Presented) The method of claim 41 further comprising:
carrying voice information which corresponds to a call waiting context over the first and the one or more second sessions carry voice information.

43. (Previously Presented) A method for operating a router comprising:
means for receiving a setup message indicating that a first session has been initiated by a network device, the first session being identified by a first session ID written into the setup message;
means for receiving a setup message indicating that at least one second session has been initiated using the session ID of the first session; and
means for sharing resources between the first session and the second session in response to both the first and second sessions having the same session ID.

44. (Previously Presented) The method of claim 43 further comprising:
means for including a data structure for storing information for the sessions in a resource reservation engine, and
means for storing the session ID for each session in the data structure in the resource reservation engine.

45. (Previously Presented) The method of claim 44 further comprising:

identifying a given session by a source address of an entity sourcing the traffic flow of the session and a resource identifier (ID).

46. (Previously Presented) The method of claim 45 further comprising:
utilizing the Resource reSerVation Protocol (RSVP) specification standard in the resource reservation engine, and
inserting the session ID of a session in a RSVP Path message associated with the given session.

47. (Previously Presented) The method of claim 46 further comprising:
carrying voice information over the first and the one or more second sessions.

48. (Previously Presented) The method of claim 47 further comprising:
originating the first and the one or more second sessions from a single sourcing entity.

49. (Previously Presented) The method of claim 45 further comprising:
originating the first and the one or more second sessions from a single sourcing entity and directing the first and the one or more second sessions to two or more different destination entities.

50. (Previously Presented) The method of claim 49 further comprising:
carrying voice information which corresponds to a call waiting context over the first and the one or more second sessions carry voice information.

51. (Previously Presented) A system for reserving resources in transmitting messages through a computer network comprising:
an intermediate network device adapted to (a) initiate a first session, (b) identify the first session by writing a session group identifier (session ID) into packets of the first

session, (c) initiate one or more second sessions using the session ID of the first session, and (d) transmit a setup message to enable other network devices to share resources between the first session and the second session in response to both the first and second sessions having the same session ID.

52. (Previously Presented) The system of claim 51 wherein a data structure is included for storing information for the sessions in a resource reservation engine, and wherein the session ID for each session is stored in the data structure in the resource reservation engine.

53. (Previously Presented) The system of claim 52 wherein a given session is identified by a source address of an entity sourcing the traffic flow of the session and a resource identifier (ID).

54. (Previously Presented) The system of claim 53 wherein a Resource reSerVation Protocol (RSVP) specification standard is utilized in the resource reservation engine, and wherein the session ID of a session is inserted in a RSVP Path message associated with the given session.

55. (Previously Presented) The system of claim 54 wherein the first and the one or more second sessions carry voice information.

56. (Previously Presented) The system of claim 55 wherein the first and the one or more second sessions originate from a single sourcing entity.

57. (Previously Presented) The system of claim 51 wherein the first and the one or more second sessions originate from a single sourcing entity and wherein the first and the one or more second sessions is directed to two or more different destination entities.

58. (Previously Presented) The system of claim 57 wherein the first and the one or more second sessions carry voice information and correspond to a call waiting context.

59. (Previously Presented) A router comprising:

a packet/frame receiver transmitter object configured to receive a setup message indicating that a first session has been initiated by a network device, the first session being identified by a first session ID written into the setup message;

a packet/frame receiver transmitter object configured to receive a setup message indicating that at least one second session has been initiated using the session ID of the first session; and

a resource reservation engine configured to share resources between the first session and the second session in response to both the first and second sessions having the same session ID.

60. (Previously Presented) The router of claim 59 wherein

the resource reservation engine includes a data structure for storing information for the sessions, and

the resource reservation engine stores the session ID for each session in the data structure.

61. (Previously Presented) The router of claim 60 wherein a given session is identified by a source address of an entity sourcing the traffic flow of the session and a resource identifier (ID).

62. (Previously Presented) The router of claim 61 wherein:

the resource reservation engine utilizes the Resource reSerVation Protocol (RSVP) specification standard, and

the session group ID of a given session is contained in a RSVP Path message associated with the given session.

63. (Previously Presented) The router of claim 62 wherein the first and the one or more second sessions carry voice information.

64. (Previously Presented) The router of claim 63 wherein the first and the one or more second sessions originate from a single sourcing entity .

65. (Previously Presented) The router of claim 59 wherein the first and the one or more second sessions originate from a single sourcing entity and direct the first and the one or more second sessions to two or more different destination entities.

66. (Previously Presented) The router of claim 65 wherein the first and the one or more second sessions carry voice information and correspond to a call waiting context.

67. (Previously Presented) A computer readable media, comprising:

said computer readable media having information written thereon, said information having instructions for execution on a processor for the practice of a method for sharing resources reserved for a first session with a second session in a computer network having a plurality of entities interconnected by a plurality of intermediate network devices having one or more resources for use in forwarding network traffic corresponding to sessions, the method having the steps of:

receiving a first resource reservation message associated with a first session, the first resource reservation message specifying a session group identifier (ID);

storing the session group ID of the first resource reservation message;

reserving resources for use with the first session;

receiving a second resource reservation message associated with a second session, the second resource reservation message corresponding to a session group ID;

comparing the session group ID associated with the second resource message with the stored session group ID specified by the first resource reservation message; and

if the two session group IDs match, sharing the resources reserved for use with the first session with the second session.

68. (Previously Presented) A computer readable media, comprising:

said computer readable media having information written thereon, said information having instructions for execution on a processor for the practice of a method for sharing resources reserved for a first session with a second session in a sourcing entity interconnected with two or more receiving entities by a computer network having a plurality of intermediate network devices, the devices having one or more resources for use in forwarding network traffic corresponding to sessions, the method having the steps of:

generating a first resource reservation message associated with the first session;

loading the first resource reservation message with a session group identifier (ID);

sending the first resource reservation message with the session group ID toward a first receiving entity;

generating a second resource reservation message associated with the second session;

loading the first resource reservation message with the session group identifier used in the first resource reservation message; and

sending the second resource reservation message with the session group ID toward a second receiving entity,

whereby resources reserved for use with the first session are shared with the second session.

69. (Previously Presented) A computer readable media, comprising:

said computer readable media having information written thereon, said information having instructions for execution on a processor for the practice of a method for reserving resources by a network device for transmission of messages through a computer network, the method having the steps of:

initiating a first session by the network device;

identifying the first session by writing a session group identifier (session ID) into packets of the first session;

initiating one or more second sessions using the session ID of the first session; and

transmitting a setup message to enable other network devices to share resources between the first session and the second session in response to both the first and second sessions having the same session ID.

70. (Previously Presented) A computer readable media, comprising:

said computer readable media having information written thereon, said information having instructions for execution on a processor for the practice of a method for operating a router, the method having the steps of:

initiating a first session by the network device;

identifying the first session by writing a session group identifier (session ID) into packets of the first session;

initiating one or more second sessions using the session ID of the first session; and

transmitting a setup message to enable other network devices to share resources between the first session and the second session in response to both the first and second sessions having the same session ID.

71. (Previously Presented) Electromagnetic signals propagating on a computer network, comprising:

said electromagnetic signals carrying information having instructions for execution on a processor for the practice of a method for sharing resources reserved for a first session with a second session in a computer network having a plurality of entities interconnected by a plurality of intermediate network devices having one or more resources for use in forwarding network traffic corresponding to sessions, the method having the steps of:

receiving a first resource reservation message associated with a first session, the first resource reservation message specifying a session group identifier (ID);

storing the session group ID of the first resource reservation message;

reserving resources for use with the first session;

receiving a second resource reservation message associated with a second session, the second resource reservation message corresponding to a session group ID;

comparing the session group ID associated with the second resource message with the stored session group ID specified by the first resource reservation message; and

if the two session group IDs match, sharing the resources reserved for use with the first session with the second session.

72. (Previously Presented) Electromagnetic signals propagating on a computer network, comprising:

said electromagnetic signals carrying information having instructions for execution on a processor for the practice of a method for sharing resources reserved for a first session with a second session in a sourcing entity interconnected with two or more receiving entities by a computer network having a plurality of intermediate network devices, the devices having one or more resources for use in forwarding network traffic corresponding to sessions, the method having the steps of:

generating a first resource reservation message associated with the first session;

loading the first resource reservation message with a session group identifier (ID);

sending the first resource reservation message with the session group ID toward a first receiving entity;

generating a second resource reservation message associated with the second session;

loading the first resource reservation message with the session group identifier used in the first resource reservation message; and

sending the second resource reservation message with the session group ID toward a second receiving entity,

whereby resources reserved for use with the first session are shared with the second session.

73. (Previously Presented) Electromagnetic signals propagating on a computer network, comprising:

said electromagnetic signals carrying information having instructions for execution on a processor for the practice of a method for reserving resources by a network device for transmission of messages through a computer network, the method having the steps of:

initiating a first session by the network device;

identifying the first session by writing a session group identifier (session ID) into packets of the first session;

initiating one or more second sessions using the session ID of the first session; and

transmitting a setup message to enable other network devices to share resources between the first session and the second session in response to both the first and second sessions having the same session ID.

74. (Previously Presented) Electromagnetic signals propagating on a computer network, comprising:

said electromagnetic signals carrying information having instructions for execution on a processor for the practice of a method for operating a router, the method having the steps of:

initiating a first session by the network device;

identifying the first session by writing a session group identifier (session ID) into packets of the first session;

initiating one or more second sessions using the session ID of the first session; and

transmitting a setup message to enable other network devices to share resources between the first session and the second session in response to both the first and second sessions having the same session ID.

75. (Previously Presented) A method for reserving resources to transmit messages through a computer network comprising:

selecting a group session ID for establishing a first session;

establishing the first session from a network sourcing device to a first network receiving device routing through an intermediate network device;

using the same group session ID for establishing a second session;

establishing the second session from the network sourcing device to a second network receiving device routing through the intermediate network device; and

sharing, in response to the first session and the second session having the same group session ID, resources reserved for the first session with the second session.

76. (Previously Presented) The method of claim 75, further comprising:

receiving by the intermediate network device a first message of the first session and a second message of the second session, the first message and the second message having the same group session ID; and

sharing by the intermediate network device, in response to the first message and the second message having the same group session ID, resources reserved for the first session with the second session.

77. (Previously Presented) A network device for reserving resources to transmit messages through a computer network comprising:

means for selecting a group session ID for establishing a first session;

means for establishing the first session from a network sourcing device to a first network receiving device routing through an intermediate network device;

means for using the same group session ID for establishing a second session;

means for establishing the second session from the network sourcing device to a second network receiving device routing through the intermediate network device; and

means for sharing, in response to the first session and the second session having the same group session ID, resources reserved for the first session with the second session.

78. (Previously Presented) The method of claim 77, further comprising:

means for receiving by the intermediate network device a first message of the first session and a second message of the second session; and

means for sharing by the intermediate network device, in response to the first message and the second message having the same group session ID, resources reserved for the first session with the second session.

79. (Previously Presented) A network device for reserving resources to transmit messages through a computer network comprising:

a signaling entity detecting a situation where a second session between a network sourcing device and a second network receiving device can share the resources reserved for a first session between the network sourcing device and a first network receiving device;

a resource identifier (ID) generator, in response to a situation where the second session can share resources reserved for the first session, selecting a same group session ID for the first session and the second session; and

a message generator sending a first message to establish the first session, and sending a second message to establish the second session, the message generator including the group session ID in both the first message and the second message.

80. (Previously Presented) A computer network having:

a first network receiving device;

a second network receiving device; and

a network sourcing device for selecting a group session ID for a first session and selecting the same group session ID for a second session, sending a first message to establish the first session between the network sourcing device and the first network receiving device, sending a second message to establish the second session between the network sourcing device and the second network receiving device, and in response to the group session ID in the second message, sharing network resources reserved for the first session with the second session.

81. (Previously Presented) The computer network of claim 83, further having:

an intermediate network device, the intermediate network device receiving the first message of the first session and the second message of the second session, and, in response to the first message and the second message having the same group session ID, sharing resources reserved for the first session with the second session.

82. (Previously Presented) A method for a computer network to reserve resources for messages sent from a network sourcing device to one or more network receiving devices, the method comprising:

selecting by the network sourcing device a group session ID for a first session and selecting the same group session ID for a second session;

sending a first message from the network sourcing device to establish the first session between the network sourcing device and a first network receiving device;

sending a second message from the network sourcing device to establish the second session between the network sourcing device and a second receiving device; and

sharing, in response to the group session ID in the second message, resources reserved for the first session with the second session.

83. (Previously Presented) The method of claim 85, further comprising:

receiving by an intermediate network device a first message of the first session and a second message of the second session; and

sharing by the intermediate network device, in response to the first message and second message having the same group session ID, resources reserved for the first session with the second session.